

WHAT IS CLAIMED IS:

1. An automatic liquid handling system comprising:

a dispensing tip container having a plurality of holding portions for holding a plurality of dispensing tips;

5 a dispensing head having attachment portions to which at least one dispensing tip selected from the plurality of dispensing tips is attached, wherein when one or more dispensing tips are attached to the attachment portions, the dispensing head is capable of performing sucking and
10 expelling operations for sucking liquid in or expelling the liquid out from the one or more dispensing tips;

moving means for moving the dispensing head;

a reagent container that holds at least one reagent;

a microplate formed with a plurality of wells for
15 holding specimen;

a control device that controls the sucking and expelling operations performed by the dispensing head and also controls the moving means to control movements of the dispensing head, the control device having input means for
20 inputting one or more processes to be executed by the dispensing head; and

time measuring means for measuring time starting from dripping the reagent into selected wells on the microplate by the expelling operation performed by the dispensing head.

25 2. The automatic liquid handling system according to

claim 1, further comprising time setting means for setting a time to finish the one or more processes to be executed by the dispensing head.

3. The automatic liquid handling system according to
5 claim 2, wherein the plurality of wells formed in the microplate is arranged in a matrix form defined by rows and columns, and the time measuring means comprises a plurality of timers, each of the plurality of timers being provided for each of the rows and each of the columns of the
10 plurality of wells for enabling measurement of time on a row or a column basis.

4. The automatic liquid handling system according to claim 3, wherein the control device performs the expelling operation to drip another reagent into selected wells of the
15 microplate when the time measuring means has measured a predetermined period of time.

5. The automatic liquid handling system according to claim 1, further comprising a display that indicates the time measured by the time measuring means.

20 6. The automatic liquid handling system according to claim 1, further comprising storage means for storing the time measured by the time measuring means

7. An automatic liquid handling system comprising:
a dispensing tip container having a plurality of
25 holding portions for holding a plurality of dispensing tips;

a dispensing head having attachment portions to which at least one dispensing tip selected from the plurality of dispensing tips is attached, wherein when one or more dispensing tips are attached to the attachment portions, the dispensing head is capable of performing sucking and expelling operations for sucking liquid in or expelling the liquid out from the one or more dispensing tips;

moving means for moving the dispensing head;

a reagent container that holds at least one reagent;

a microplate formed with a plurality of wells for holding specimen;

a control device that controls the sucking and expelling operations performed by the dispensing head and also controls the moving means to control movements of the dispensing head, the control device having input means for inputting one or more processes to be executed by the dispensing head; and

self-diagnosing means for simulating time to execute the one or more processes to be executed by the dispensing head and determining whether the one or more processes are executable in the time set by the time setting means.

8. The automatic liquid handling system according to claim 7, wherein the self-diagnosing means comprises informing means for informing an operator of a result of determination.